REGION/ORD SCIENCE SUMMIT:
Putting Science to Work – Regions and ORD
Advancing Environmental Decisions
October 2, 2007 RTP, NC

SUMMIT HIGHLIGHTS

Target Audience: Deputy Regional Administrators, ORD's Executive Council and National Program Directors

Background: The purpose of the Science Summit is to identify opportunities to strengthen the ORD-Regional partnership, particularly in areas where ORD and the regions can collaborate together to address the regions most challenging environmental problems. The primary objectives of the summit are: (1) showcase several new ORD efforts to support regional science needs, (2) describe new approaches to regional input in ORD budget decisions, and (3) improve collaboration to achieve outcomes that support key regional science priorities.

Goal: Set a vision of a future successful ORD – Region partnership. Be as specific and concrete as possible, asking the right questions and providing specific answers. Use specific examples and emphasize products (not planning). Our approach is to communicate via best practices leading to successful outcomes.

8:30 I. INTRODUCTION

Welcome (George Gray, ORD)
- Background—Timeline
- Preparation for this Summit
- Summit Format

Roadmap to a Successful Partnership (Ira Leighton, R1)
- Vision of Success
- Agenda Preview – Showcasing Best Practices and Proposing Actions
- Expectations

9:00 II. RESEARCH: Planning and Delivery of ORD Research Products to the Regions (Session Leads: William Wisniewski, R3 and Eric Weber, OSP)

Highlighted Best Practices: Use of Integrated Assessment Teams. Examples include: (1) Mid-Atlantic Integrated Assessment (MAIA) Project-R3; (2) rapid access to ORD science in response to emergency situations-R6; and (3) targeting ORD extramural research on regional priorities (SBIR)-R7.

Recommended Actions: (1) Expanded use of Regional Science Integration Teams (RSITs) for high priority regional needs, (2) greater integration of ORD's new National Program Directors (NPDs) with regional programs, (3) use of

annual Regional Science and Technology Review (RSTR) to review priorities, (4) ORD tools to search, access, tag and track research during lifecycle of projects, (5) improved marketing of research (life cycle approach), and (6) recognition/ support for ORD staff.

Discussion Highlights:

Region

• For RSITs, include a mechanism at the front end to identify regional priorities and ORD follow-up/response.
• Good science must be a part of (Rapanos) wetland decisions; we need appropriate NPDs involved now (R10 meetings this Fall).
• NPDs/Division Directors meet over national issues at national meetings; tie pieces together; connect ORD staff to on-going regional work; use RSTRs (strategic reviews) as a spring board to make this happen.
• Fuller outcomes when all parties are at the table; desire to coordinate and be more selective regarding who should attend a meeting; observed that much ORD effort is long-term and forward looking; desire for rapid ORD response following agreement on an issue.
• Observed that ORD engages 2 to 3 years after a hot topic arises (prion and asbestos examples); how to bring science along faster; noted examples of clients who hold us back and being honest about the field of play.
• Restated a desire for a systematic way of communication, including prioritization and follow-up; proposed using RSITs for multi-region issues; for strategic reviews (RSTRs), desire for regions to interact with the right ORD staff; timing and participants for strategic reviews need to be resolved; also use strategic reviews to connect with National Program Offices.

ORD

• ORD recognition for regional support—region and program office staffs currently sit on ORD promotion boards; ORD elevate its regional support awards to a higher level.
• Proposed annual strategic reviews (RSTRs).
• Reaffirmed ORD desire to connect with regional work; you tell us where we need to be; questioned how to be more integrated and interact with regional division directors.
• Reaffirmed desire for integration among regions, program offices, and ORD; drew a comparison between RSITs and the Tribal Science Council; proposed that both may be a good use for RARE funds.
• Land NPD highlighted application of their Regional Research Advisory Workgroups to develop and prioritize research needs.
• Confirmed ORD comfortable in an advisory role (giving regions interim advice), coupled to being a leader in science.

10:00 BREAK

10:15 II. RESEARCH (continued): Easier access to ORD research

Highlighted Topics: (1) Tracking System—integrate existing data bases to improve project/product tracking capability; new web site to include regional needs and feedback to ORD. (2) Environmental Science Connector—Region 1 and 5 pilots; 12 projects have expanded to 225; allows users to collaborate and share data, as well as capability to include external partners.

Discussion Highlights:

Region

• DRAs emphasized the value of these tools in keeping their staff (e.g. local regional science councils) engaged in collaborations.
• Summarized a desire for strategic choices (where to invest ORD resources), coupled to quality communications; regions owe ORD a more systematic way of engagement (speaking with one voice); this is particularly important in strategic reviews—when they occur and who should attend—regional priorities versus ORD (budget) trade-offs.

ORD

• Noted in developing a list of priorities from regions that there are multiple connections both within and across regions; questioned how to coordinate within and across regions to identify their highest priorities (especially RA/DRA priorities); we need a system to identify highest priorities.
• Holes exist in ORD game plan; examples are funding for the national land cover data base and ECOTOX data base; desire to put these on the table for resolution.

10:45 III. NON-RESEARCH: Planning and Delivery of Non-Research Support to the Regions (Session Leads: Russ Wright, R4 and Jon Herrmann, NHSRC)

Highlighted Best Practices: Technical support to regions through collaboration/ cooperation. Examples include (1) Water Quality and Biological Impacts of Disrupted Great Lakes' Food Webs; (2) Estrogenic Endocrine Disrupting Chemicals, (3) Assessment of Human Health and Environmental Risk from PCBs Released from the Ex-Oriskany; and (4) Technical Support Centers provide state-of-the-art remediation technology information on an as-needed basis to OSCs and RPMs

Recommended Actions: (1) Continued support for Technical Support Centers, and (2) utilize ORD Program Support staff to match ORD expertise to regional science needs, using RSLs to communicate ranked needs.

Discussion Highlights:

Region

• Emphasized unplanned/unknown nature of this area, requiring the best decision; important to build bridges between ORD and regions to meet these needs.
• A role for ORD in engaging National Program Managers via Lead Regions.

• Value of locating RSL in front office (R4), where division priorities are known; use RSL to do leg work to set up needs for prioritization.
• Value of existing platforms (RARE, RRPP) to facilitate response to science needs; importance of building relationships for rapid response to emergency; desire for adequate recognition system to reward staff actions.
• RARE and RRPP work well in regions; direct NPD interactions have real benefits (Mid-West Landscape); good experiences with RSL as Science Advisor to RA/DRA (R8)—interface to ORD.
• Importance of geographic proximity advantage (R4) to ORD; application of MOU to document collaboration.
• Program Support—streamline current approach and do more efficiently; systematic approach to document and prioritize needs; potential to integrate into technical support; system explicit and advantage with point person in ORD.
• What OSP does—program versus technical support; the latter is very important for Superfund (problems more complex); OSP as a catalyst; who will address regulatory issues?
• Community town hall meetings (human health/levels of protection)-how to include ORD at the table (with CDC) and not compromise their scientific integrity?
• RSL presently goes direct to ORD Lab for technical support-R7; no problem with a process like Program Support, as long as it does not get in the way; may not need a broker in all cases.

<u>ORD</u>
• Importance of Superfund TSCs; perception that tech support competes with research; TS (hours/days/weeks) versus Research (months/years).
• Homeland Security examples—personnel exchanges; Katrina support; R1/anthrax; eLRN (methods); TRIO collaborations (all about relationships); outreach workshops (expos).
• Program Support—delivery of scientific advice (review documents, participate on workgroups, advise scientists/managers); develop lists of actions by program and work with client to assign priorities; OSP staff—Lab/Center coordinators—350 Lab/Center scientists.
• Program Support works well, especially when contrasted with alternate approaches like Biosketch, to access ORD staff; when the need includes a capacity issue (like for tech support), preference is for a coordinator (Lab/Center contact).
• Explore parallel Program Support for regions; yes, ORD does comment on regulatory issues (like Lead); see a definite role for RSLs in this process--are they positioned within the region to be aware of RA/DRA priorities or are they buried somewhere in a branch?

11:45 LUNCH (posters)

1:00 IV. TECHNOLOGY: Finding Technology Solutions for our Environmental Problems (Session Leads: Bharat Mathur, R5 and Sally Gutierrez, NRMRL)

Highlighted Best Practices: Environmental Technology Verification (ETV) and Small Business Innovation Research (SBIR) programs. Examples include: (1) Use of copper mine tailings in the manufacture of roofing shingles; (2) development of XRF technology for easy to use hand held metal detection in soils; (3) evaluation of remote sensing infrared camera.

Recommended Actions: (1) Move forward on vision and goals of new Senior Environmental Technology Officer (SETO) and Regional Technology Advocates positions, and (2) identify priority technology gaps, and (3) strengthen transfer of environmental technologies to the regions and private industry.

Discussion Highlights:

Region

• Reasons examples successful—timely response (experts available; near term); tools available (SBIR; RARE); acceptance of outside ideas; SETO will catalyze all of these.
• Technology forcing functions—cost and performance are critical; enforcement non-compliance; all of great interest to technology developers.
• ETV/Testing Centers—Letter requesting more testing centers (diesel); council of local governments-proper EPA role here; linking back to drivers (indicators); strengthen connections with other agencies (great leveraging capacity); role for SETO; outreach-do we survey outside-what is our unique niche?

ORD

• Success stories—Asbestos removal (R6); 34 State Drinking Water workshops (desire greater regional involvement); tech assistance sites (Lead/Copper Rule; 15 years; still doing R&D support).
• Commitment to technology—SETO; ETC; RETA; ETV/assessment staff; innovative technology tool box.
• RETAN—advocate for new technologies; survey technology needs.
• 2008 Science Forum—Highlight technology.
• SETO will be located in the Office of Science Advisor; important to fill Chief Scientist position first; will advertise SETO detail prior to final position (rename SETO).
• Loss of Tech Support Centers—OSP to manage Site Characterization TSC (vice Las Vegas-ESD).
• ETV/Testing Centers—Private sector role limits ORD (budget zeroed); how to leverage business sector; how to convince Congress?

1:45 V. PUTTING SCIENCE TO WORK: Collaboration and outcomes challenge
(Session Leads: Kerry Clough, R8 and Kevin Teichman, ORD)

Collaboration/Outcomes Challenge: DRAs present their important regional science needs for collaboration and ORD/Regions market successes.

Highlighted Science Needs: Examples of regional science needs include: (1) Development of an Alternative Asbestos Control Method; (2) Innovative Technologies for Remediation of Contaminated Sediment Sites; and (3) Children's Health in Alaska.

Recommended Actions: (1) Acknowledge list of combined regional science needs and areas of overlap, and (2) align previous sessions best practices and recommended actions with identified regional science priorities, and (3) discuss best practices that could be used to address budgetary concerns and decisions that potentially impact regional programs, and (4) set target dates for follow-up of action items and strategic reviews.

Discussion Highlights:

Region (a couple priority needs from each region)

• Region 7—Biofuels Impacts; Lead Mine Tailings; Agriculture (CAFOs)
• Region 4—Mercury Methylation/Watersheds; Agriculture (CAFOs/ technologies/controls); Alternate Fuels-Clean Energy.
• Region 1—Non-Point Source/storm water/water quality; Diesel Retrofit Technology; Climate Change-regional green house gas control strategy/cause and effect of different strategies.
• Region 5—Asbestos-health standards for different types-emission standard-road aggregate; CAFOs-liquids runoff in winter into water bodies.
• Region 10—Alaska Children Health Study; Impact of Forest Fires; Mercury Methylation; Storm Water.
• Region 9—Algal Blooms (monitoring/prevention); Ozone/Particulate (workshop-technologies); Clean Water-tools (Rapanos).
• Region 6—Ozone; Cumulative Risk Assessment (more useable); Hurricane Debris.
• Region 3—Chesapeake Bay; Manure/CAFOs; Agricultural issues.
• Region 2—Diesel Project (particulate identification); Contaminated Sediments (covers dredging alternatives); Eutrophication (biological/estuary indicators).
• Region 8—Asbestos (Libby site); Energy (19 EISs/58,000 wells); Mercury (Utah/Great Salt Lake).

ORD (response to two cross-cutting priority needs)

(1) CAFOs—inventory of federal agencies/collaborative opportunities; link to pharmaceuticals/EDCs-meeting in October to be attended by RSLs; in-house efforts/seven grants this year; different types of CAFOs (EDCs/hormones versus need for broader types); August workshop in Region 5 (USGS, FDA); microbiology (beaches)-disease versus human/ruminant waste (looking for study sites); are we doing anything more practical?; energy potential conversion; RSL (R3) workshop (technical needs); USDA big player-desire for higher level involvement (DRA/RA/AA); RARE CAFO projects.
(2) Diesel Retrofits—large investments in this area; regions promote public health (particulates issue); desire to be more proactive; cost/performance issues; diesel/carbon signal-desire to pull together sources (source contribution);

urban particulate profile-measureable health benefits (research/applied aspects); IRIS assessments; diesel traps (rare metals-Pt, Cs).

2:45 VI. SUMMIT WRAP UP: Updates and Open Discussion (time permitting)

• ORD to attend regional award ceremony.
• Priority Needs—good application for Program Support approach.
• More focused efforts (science details/training) to strengthen ORD/Region relationships.
• More local (regional) events with ORD-arrange via public affairs.
• Enhance ORD/Region communications-NPD fact sheets; speakers bureau; communicate with a common language; recruiting new staff who can communicate science.
• Still need to address funding issues for data bases (NALC; ECOTOX).
• All documents, presentations, actions, etc. from this summit will be posted on OSP intranet site.

RECOMMENDED ACTIONS	***PARTIES RESPONSIBLE FOR FOLLOW UP***
Research	
Develop annual review process, involve programs (through lead region coordinators?)	OSP, NPDs, Region 1, Zenick
NPD participation at national program meetings	Teichman, Leighton, DAAs, Lead Regions
Planning < Communicating	RSLs, NPDs
Implement Regional Science Integration Teams (RSITs), on as needed basis	NPDs, RSLs
Recognition and reward of ORD scientists' support of regions (ORD-AA at Regional award meeting)	ORD SC, Regions
Implement tracking system of research needs and continued development of Science Connector	OSP, ORMA, Region 1, 3, 5
Improving communication of research results	OSP, NPDs, Region 2
Non-Research	
Implement a regional analog to OSP program support function – include immediate needs response	Regions 6 and 9, OSP, RSLs
ORD provide support in town meetings, helping to influence program / office decisions	All
Regions review roles of RSLs and STLs to ensure that they are informed on RAs/DRAs highest science priorities	Regions

Technology	
Move forward with RETAN and SETO positions – Advertise SETO detail prior to final position (rename the SETO)	OSA, Regions
Develop business strategy to implement SETO and RETAN effectively	SETO and RETAN
Help build support for an EPA role on technology development and verification – develop case studies of technology impacting costs of implementing rules	SETO, NRMRL, R6, R1
Other /Cross Area	
Details and training opportunities across ORD and Regions	All
Find collaborative opportunities to communicate and promote success stories in implementing science and technology in decision-making	Regions, ORD-communications
Identify follow up on regional priorities presented to find the appropriate solutions	OSP, RSLs, NPDs

3:15 BREAK

3:30 LAB TOUR (posters)